

Claims:

1. A no-needle blood access device for hemodialysis comprising,

an elongated metallic body, the body being provided at its upper surface with a recess, a periphery of the recess being formed with a peripheral wall defining a well therein;

a pair of shutters slidably housed within opposed pockets respectively, the pockets being formed at the upper part of the body so that each of their lower surfaces flush with the bottom surface of the recess, each of the shutters including through-holes respectively;

a longitudinally extending through-hole disposed in the lower part of the body, each of first and second artificial conduits being fitted into respective ends of the longitudinally extending through-hole, the artificial conduits being anastomosed to a targeted artery or vein; and

a pair of vertical through-holes disposed at portions of the body each communicating to the respective through-holes of the shutters when they are opened;

whereby the device is arranged such that, when each of the shutters is slided in a direction away from each other, the well is in communication with each of the artificial conduits through the longitudinally extending through-hole and the vertical through-holes of the body and each of the through-holes of the shutters, and when each of the shutters is slided in a direction near to each other, the well is out of communication with each of the artificial conduits.

2. A no-needle blood access device for hemodialysis in accordance with Claim 1, wherein each of the shutters including a

horizontal portion housed within the pocket and a vertical portion formed in the end facing with respect to each other respectively, each of the through-holes of the shutters being provided at the vertical portion.

3. A no-needle blood access device for hemodialysis in accordance with Claim 2, wherein each of the vertical portions is provided with a recess which is used when the shutters are open and closed.

4. A no-needle blood access device for hemodialysis in accordance with Claim 1, further comprising a cannula assembly connected to a dialyzer, the cannula assembly including a pair of cannulas, one end of each of the cannulas being provided with an adapter for mounting the cannula to the body, the adapter being provided with a locking member for preventing the cannula from being removed.

5. A no-needle blood access device for hemodialysis in accordance with Claim 2, further comprising a cannula assembly connected to a dialyzer, the cannula assembly including a pair of cannulas, one end of each of the cannulas being provided with an adapter for mounting the cannula to the body, the adapter being provided with a locking member for preventing the cannula from being removed.

6. A no-needle blood access device for hemodialysis in accordance with Claim 3, further comprising a cannula assembly connected to a dialyzer, the cannula assembly including a pair of cannulas, one end of each of the cannulas being provided with an adapter for mounting the cannula to the body, the adapter being provided with a locking member for preventing the cannula from

being removed.

7. A no-needle blood access device for hemodialysis in accordance with Claim 4, wherein the locking member including a projection for locking in a groove formed in a side surface of the vertical portion of each of the shutters.

8. A no-needle blood access device for hemodialysis in accordance with Claim 5, wherein the locking member including a projection for locking in a groove formed in a side surface of the vertical portion of each of the shutters.

9. A no-needle blood access device for hemodialysis in accordance with Claim 6, wherein the locking member including a projection for locking in a groove formed in a side surface of the vertical portion of each of the shutters.

10. A no-needle blood access device for hemodialysis in accordance with Claim 4, wherein the locking member including a groove for being locked in a projection formed in a side surface of the vertical portion of each of the shutters.

11. A no-needle blood access device for hemodialysis in accordance with Claim 5, wherein the locking member including a groove for being locked in a projection formed in a side surface of the vertical portion of each of the shutters.

12. A no-needle blood access device for hemodialysis in accordance with Claim 6, wherein the locking member including a groove for being locked in a projection formed in a side surface of the vertical portion of each of the shutters.